

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A method for isolating ingredients from biological material, comprising the steps of:

- a) electroporating the biological material,
- b) separating off cell juice from the electroporated biological material,
- c) subjecting the electroporated biological material to an alkaline extraction treatment at a pH of from ~~approx. about~~ 7 to ~~approx. about~~ 14 to produce an extract,
- d) obtaining the ingredients of the biological cell material in the cell juice and in the extract.

2. (Currently Amended) The method as claimed in claim 1, ~~characterized in that~~ wherein the biological material in step a) is subjected to a high voltage field in a conductive medium.

3. (Currently Amended) The method as claimed in claim 1 ~~or 2, characterized in that~~ wherein, in step b), the separation of the cell juice from the biological material is effected ~~by means of~~ mechanical loading, ~~preferably by means of tumbling~~.

4. (Currently Amended) The method as claimed in claim 3, wherein ~~the~~ mechanical pressurization of the biological material is always less than 2 Mpa.

5. (Currently Amended) The method as claimed in ~~one of the preceding claims, characterized in that~~ claim 1, wherein step b) takes place in a screw, ~~preferably in a full screw~~.

6. (Currently Amended) The method as claimed in ~~one of the preceding claims~~, characterized in that claim 1, wherein, in step b), the biological material is supplied with at least one auxiliary substances substance[[,]] ~~preferably lime and/or milk of lime~~.

7. (Currently Amended) The method as claimed in ~~one of the preceding claims~~, characterized in that claim 1, wherein step c) is carried out at a temperature of from 0 to 65°C, ~~preferably of from 45 to 60°C~~.

8. (Currently Amended) The method as claimed in ~~one of the preceding claims~~, characterized in that claim 1, wherein the biological material comprises at least one of sugar beet (*Beta vulgaris*) and[[/or]] sugar beet chips.

9. (Currently Amended) The method as claimed in ~~one of the preceding claims~~, characterized in that claim 1, wherein the biological material comprises chicory.

10. (Currently Amended) A device for isolating ingredients from biological material[[,]] ~~in particular in accordance with~~ according to the method as claimed in ~~one of claims 1 to 9~~, claim 1, said device comprising having at least one appliance for electroporation (1) and at least one extractor (8), characterized in that wherein at least one full screw (5) for receiving the electroporated biological material, ~~which full screw is preferably perforated at the outer jacket and/or at the screw threads~~, is arranged between the appliance for the electroporation (1) and the extractor (8).

11. (Currently Amended) The device as claimed in claim 10, ~~characterized in that~~ wherein the at least one full screw (5) is designed as a conveyor screw and ~~the~~ wherein a first section of the screw which is designed for receiving the electroporated biological material is formed at a lower point, and ~~the~~ a second section of the screw which is designed for releasing the conveyed biological material is formed at an upper point, of a gradient which exists between ~~these~~ said first and said second sections.

12. (Currently Amended) The device as claimed in claim 10 ~~or 11~~, further comprising ~~characterized in that~~ at least one metering device (6) for metering auxiliary substances ~~is additionally present~~.

Add the following new claims:

13. (New) The method as claimed in claim 3, wherein said mechanical loading comprises tumbling.

14. (New) The method as claimed in claim 5, wherein said screw is a full screw.

15. (New) The method as claimed in claim 6, wherein the auxiliary substance is at least one of lime and milk of lime.

16. (New) The method as claimed in claim 7, wherein step c) is carried out at a temperature of from 45 to 60°C.

17. (New) The device as claimed in claim 10, wherein the full screw is threaded and at least one of an outer jacket of said screw and said screw threads is perforated.